
Notes on Malaysian Dragonflies (Odonata), with descriptions of New Species

By F. F. LAIDLAW
(with two text figs.)

Leptogomphus risi sp. n. (Fig. 1.).

1 ♂ Catchment area near Jitra, Kedah. 7-iv-28.

Head: upper lip yellow, with a broad, black, anterior margin, which is produced backward in the middle line so as nearly to divide the yellow into two parts. Both parts of clypeus black, genæ yellow. Horizontal part of frons yellow, divided in the middle line by a narrow black groove. Rest of head brownish-black.

Mus. 7, 1932.

[95]

Prothorax: brownish-black, with a small, paired yellow spot on the middle of the posterior margin, and a small lateral spot of the same colour on either side.

Synthorax: brownish-black above, the yellow mesothoracic collar narrowly divided in the middle line. Dorsal stripe joining the collar and of the same colour, antehumeral stripe obsolete save for an exceedingly small vestige at the upper end. Sides yellow with a black band along the second lateral suture.

Abdomen: almost entirely brownish-black, with small lateral marks on the first and second segments, yellow. Vesicle small, hamuli rather large.

Legs: brownish-black, the tibiae shading to brown.

Anal appendages: upper pair rather longer than lower appendage, widely separated at their base, curving towards each other apically and tapering, apex a little knobbed. A finely serrated ridge runs along the ventral surface of each. Their upper surface is white, the under side brownish-black. Lower appendage with a pair of widely-divaricated, curving branches which are black in colour.

Length of abdomen, 37 ± 2 mm.

of hind-wing 29 mm.

Wings: Pterostigma 2.5 mm. long, dark brown.

Nodal indicator	12	15	17	10
	9	12	11	9

Other characters of the genus.

Differs from other species, so far as known to me by the regularly incurved upper anal appendages. The female is not yet known.



Text-fig. 1 Anal appendages from above. (Flattened and distorted. Camera Lucida).

Calicnemia rectangulata sp. n. (fig. 2a.).

2 Kuala Boh, Cameron Highlands, Pahang, 31-v-31.

Length of abdomen 29.5 mm.

of hind-wing 22.5 mm.

16-18 postnodal nerves on fore-wing. 4 discal cells on the same wing, 3 on hind-wing. Quadrangle of fore-wing shorter than that of hind-wing, its costal margin two-thirds the length of its anal margin costal margin of hinder quadrangle about three-quarters the length of the anal margin. Other venational characters those of the genus. Wings uniformly tinged with yellow.

Head: dorsum entirely velvety black.

Prothorax: purely black above, sides lighter rather pulverulent.

Synthorax: dorsum entirely velvety black, sides bluish white, slightly pulverulent, with a complete black line on the second lateral suture.

Abdomen: black, segment I with a light spot on either side; 2 and 3 scarlet but 3 fading to black apically.

Legs: black.

Anal appendages: black. (fig. 2a.).

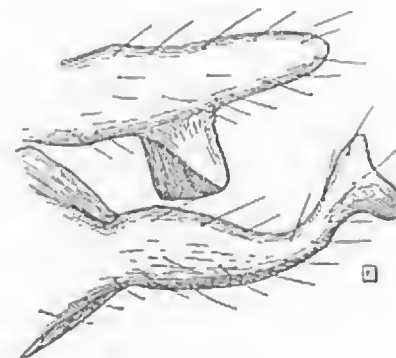


Fig. 2a.—*Calicnemia rectangulata* sp. n. ♂. anal appendages.

Upper pair finger-shaped, each with a prominent, ventral projection, descending from the middle of the ventral margin. The projection carries a large flange-like process internally, which gives the whole a rectangular outline when looked at in profile. Lower pair rather longer than upper, at first narrowing gradually then swelling at the apex, which is distinctly bifid.

I am indebted to Mr. Kimmins of the British Museum for the figures of the anal appendages of this species and of *C. chaseni*. (Text-fig. 2b.). It will be evident that in details of the appendages the two species are quite distinct, whilst the latter is also distinguished by its more vivid colouring, the male of *chaseni* having red markings on the head and the abdomen almost entirely red or reddish brown.

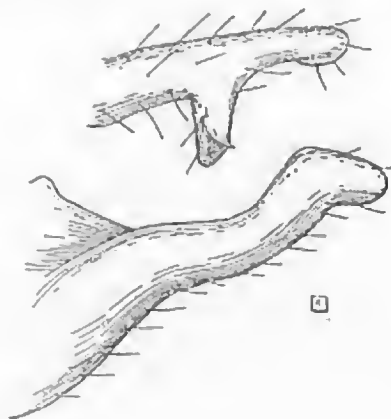


Fig. 2b.—*Calicnemia chaseni* (Laidl.). Anal appendages of type ♂.

The occurrence of a second species of this genus in Malaya was quite unexpected by me, and serves to suggest that our knowledge of the fauna is still decidedly incomplete.

Note on the name *Calicnemia*.

Mr. Kimmins has very kindly called my attention to a paper by Strand (E. Strand, Arch. f. Naturges. 92.A. 8. p. 46. 1926) in which that writer points out that the name *Calicnemis* is pre-occupied by *Calicnemis* Laporte de Castelnau, 1832, (Coleoptera). Strand suggests the name *Calicnemia* in its place.